## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary Report No: WIR-013033
Address: 333 Burma Road Date Inspected: 05-Apr-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 700
Prime Contractor: American Bridge/Fluor Enterprises, a JV OSM Departure Time: 1900

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

**CWI Name:** Chen Xi **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:** 

Bridge No: 34-0006 Component: Orthotropic Box Girder (OBG)

## **Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

#### OBG # CROSSBEAM CB 07

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

## **OBG # CROSS BEAM CB08**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

# OBG # CROSS BEAM CB09

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### OBG # CROSSBEAM CB 10

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This QA observed ZPMC qualified welding personnel identified as 048047 perform Shielded Metal Arc Weld (SMAW) Process repair welding on various weld joints. ZPMC Quality Control Personnel (QC) identified as Mr. Wang Liang was present to monitor the welding process. Mr. Wang Liang informed this QA that a majority of the repairs being performed today are under size welds. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-3G (3F)-Repair.

## OBG # CROSS BEAM CB 11

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### OBG # CROSS BEAM CB12

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB13**

This QA observed ZPMC qualified welding personnel identified as 044581 perform Shielded Metal Arc Weld (SMAW) Process repair welding on weld joint CA202A-013-017. ZPMC Quality Control Personnel (QC) identified as Mr. Sun Yan Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and B-WR11632.

This QA observed ZPMC qualified welding personnel identified as 044551 perform Shielded Metal Arc Weld (SMAW) Process repair welding on weld joint CB202G-040-049. ZPMC Quality Control Personnel (QC) identified as Mr. Sun Yan Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-3G (3F)-Repair and B-WR11626.

This QA observed ZPMC qualified welding personnel identified as 044551 perform Shielded Metal Arc Weld (SMAW) Process repair welding on weld joint CB202G-039-043. ZPMC Quality Control Personnel (QC) identified as Mr. Sun Yan Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-3G (3F)-Repair and B-WR11630.

This QA observed ZPMC qualified welding personnel identified as 044551 perform Shielded Metal Arc Weld (SMAW) Process repair welding on weld joint CB202G-037-039. ZPMC Quality Control Personnel (QC) identified as Mr. Sun Yan Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-3G (3F)-Repair and B-WR11631.

## **OBG # CROSS BEAM CB14**

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This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB15**

This QA observed that ZPMC Magnetic particle Testing (MT) technician identified as Mr. Jin Jian Ting performs MT on various weld joints. The technician found one (1) Longitudinal Linear Indication approximately 8mm long. The weld joint identified as FB205-046-038. See attached picture. No significant work was being performed on this crossbeam during the time QA was present.

## **OBG # CROSS BEAM CB16**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### OBG # CROSS BEAM CB17

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





# **Summary of Conversations:**

As mention above

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Sukanthan, Dhanasingh Quality Assurance Inspector **Reviewed By:** Hall,Steven QA Reviewer